

Claims

- 5 1. Integrated electromechanical microstructure comprising a base substrate and a cavity closed by a protective cover, microstructure comprising pressure adjusting means comprising at least one element made of pyrotechnic material, combustion whereof releases gas into the cavity so as to adjust the pressure in the cavity after the protective cover has been sealed
- 10 2. Microstructure according to claim 1, wherein the element made of pyrotechnic material is deposited in the cavity.
- 15 3. Microstructure according to claim 1, wherein the element made of pyrotechnic material is deposited in an additional cavity formed in the protective cover, a micro-orifice of the protective cover joining the two cavities.
- 20 4. Microstructure according to claim 1, wherein the pyrotechnic material is deposited on an electrical resistor connected to external electrical terminals.
- 25 5. Microstructure according to claim 1, wherein the protective cover comprises a zone made of material transparent at a preset wavelength.
6. Microstructure according to claim 1, wherein the pyrotechnic material is a mixture of sodium nitride, potassium nitrate and silica.
7. Microstructure according to claim 1, wherein the pressure adjusting means comprise a plurality of elements made of pyrotechnic material able to be selectively ignited.

8. Process for adjusting the pressure in the cavity of a microstructure according to claim 1, comprising ignition of at least one element made of pyrotechnic material after the protective cover closing the cavity has been sealed.

- 5 9. Process according to claim 8 for adjusting the pressure in the cavity of a microstructure according to claim 5, wherein ignition of the element made of pyrotechnic material is caused by a laser beam coming from outside the microstructure and directed towards the element made of pyrotechnic material through a transparent zone of the protective cover.